IMPLEMENTATION PLAN FOR RECOMMENDED ACTIONS IN CLEAN LAKES REPORT

Prepared by Lake County Department of Public Works, Flood Control Division:
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The Clean Lakes Diagnostic/Feasibility Study for Clear Lake, California (Chapter 10) recommends a number of actions for control of nuisance algal blooms in Clear Lake. The report recommends the use of Best Management Practices (BMPs) which are resource management and land-use practices designed to maintain water quality or prevent or minimize water quality problems. This proposed plan for implementation of such BMPs assumes the availability of adequate resources to the County of Lake. The dates in parentheses indicate the target date for completion of each implementation project.

Action 1 Protect and rehabilitate stream channels by Best Management Practices. Restored streams will reduce soil erosion that contributes to the nutrient loading of Clear Lake and thereby limit nuisance blue-green algae scums.

Implementation:

1.1 Scotts Creek Watershed Project - EPA Non-Point Source Grant: In a cooperative effort with landowners, public agencies and community groups, the project will define BMPs by constructing a variety of demonstration projects for rehabilitation and erosion control on the 100-square mile Scotts Creek watershed. Project includes preparation of guidelines for BMPs in the creek and watershed, and a public information program. (July 1, 1994 through June 30, 1996)

1.2 Construct erosion, stream bank and riparian restoration projects. Initial projects will be located on the largest sediment sources: Middle, Scotts, Kelsey and Adobe Creeks. Applications for grant funding for the Middle Creek Restoration Project will take place in 1994. Watershed inventories will be prepared for smaller creeks to identify additional sources suited to stream restoration projects. (2000)

1.3 Prepare Master Plans of Drainage for residential communities around the lake that will include requirements for on-site stormwater detention and sedimentation basins. Kelseyville community is budgeted for FY94-95, followed by North Lakeport, Upper Lake, Nice, Lucerne, Lower Lake and the unincorporated area around the city of Clearlake in subsequent years. (2002)

1.4 Review and evaluate creek maintenance practices of County and cities for consistency with BMPs. (1995)

Action 2 Protect and rehabilitate wetlands for nutrient filtering capability, especially in the Rodman Slough and Robinson Lake area, and also smaller systems:

Implementation:

2.1 Review the deteriorating levee system in the vicinity of Rodman Slough including the Reclamation District levee. Serious consideration will be given to the option of rehabilitating the old Robinson Lake area as a functioning wetland with sediment retention, nutrient filtering capability, and significant flood control benefits. Following this review, staff will recommend an appropriate strategy to the Board of Supervisors. (1995)

2.2 Should the rehabilitation of the Robinson Lake area be selected as a viable option for the flood control needs, the requirements of CEQA and NEPA must be considered. Environmental

documentation, acquisition of rights-of-way, engineering, design and preparation of plans will take several years to complete. (2003)

2.3 Construct erosion control and flood control improvements in the Robinson Lake area. (2005)

2.4 Develop a public education program to inform private landowners near the lake of the benefits of maintaining and managing small wetland areas on their properties. This could include working with community groups and area high schools to restore tule marshes on the lake shore. (ongoing)

2.5 Review the County's proposed wetland policy for consistency with BMPs and evaluate the report recommendation of 3 for I wetland mitigation policy. Recommend adoption of the policy to the Board of Supervisors. (1996)

Action 3 Reduce erosion from roads:

Implementation:

3.1 Review and discuss road maintenance and construction practices with the various agencies and private owners of roads and driveways in the Clear Lake Basin. In particular, meet with Caltrans, Bureau of Land Management (BLM), and U. S. Forest Service (USFS). (1996)

3.2 Review and evaluate County practices and procedures for road maintenance and construction for consistency with BNDS. Make appropriate recommendations for rehabilitation of unused roads and particularly erosive dirt roads. (1995)

3.3 Prepare guidelines for BMPs to reduce erosion from roads and driveways. Consult with Air Quality Management District. (1996)

Action 4 Control miscellaneous earth moving that increases erosion into the lake:

Implementation:

4.1 Review the County's grading ordinance for consistency with BNDS. Make appropriate recommendations. (1997)

Action 5 Control erosion after wildfire:

Implementation:

5.1 Review and discuss practices and procedures for erosion control after wildfires with BLM, USFS. Make appropriate recommendations where improvement is needed to be consistent with BMPs. (1997)

5.2 Obtain or prepare guidelines for BMPs for use by private property owners in wildfire areas. (1997)

Action 6 Use phosphorous export in negotiations with Yolo County Flood Control and Water Conservation District regarding draw down schedule:

Implementation:

6.1 The current operating procedure for Cache Creek Dam is probably optimal for summertime phosphorous export. Flood Control staff will continue to monitor operations of Cache Creek Dam and Indian Valley Reservoirs. Since annual nutrient status varies with climatic changes,

coordination with the water quality monitoring program will indicate if minor revisions to the operating schedule should be pursued. (ongoing)

Action 7 County should require proper circulation in future confined-channel developments.

Implementation:

7.1 Review existing codes and ordinances that control development of lake-side lagoons and inlets for consistency with BMPs. Appropriate revisions and/or enforcement recommendations will be made to the Board of Supervisors. (1996)

7.2 Review potential for installation of circulation facilities in existing confined channels. (2002)

Action 8 Establish a lake management agency or consolidate the primary responsibility for major lake problems in a single existing agency:

Implementation:

8.1 Evaluate re-organization options that would consolidate primary responsibility for the lake in a single County department. Make recommendations to Board of Supervisors. (1997)

8.2 Develop policy recommendations to protect water quality through coordinated activities of County departments with interests in the lake and water resources. (1995)

Action 9 Develop adequate financial resources to manage the lake via grants, state agency in-kind contributions, user fees and special assessment districts:

Implementation:

9.1 Propose partial use of Transient Occupancy Tax (TOT) funding for lake enhancement programs. (1994)

9.2 Apply for additional grant funds for implementation of stream restoration and wetlands enhancement programs and for additional assessment of septic systems, etc. (1994 and ongoing)

9.3 Develop partnerships with private, state and federal agencies for potential joint use and cooperative projects. (ongoing)

9.4 Review and evaluate the use of user fees and special assessments to fund major restoration projects. Make recommendations to the Board of Supervisors. (1996)

Action 10 Develop an expanded monitoring program for the lake and stream.

Implementation:

10.1 Coordinate existing monitoring programs with U. S. Geologic Survey (USGS), BLM, USFS, State Department of Water Resources (DWR), Lake County Mosquito Abatement District, U. C. Davis and other County departments. Share data and consolidate efforts where appropriate. (ongoing)

10.2 Review and evaluate adequacy of existing monitoring program for lake management purposes. Recommend additional parameters, sampling frequency, and more timely reporting as appropriate. (1995)

10.3 Continue stream monitoring program. Evaluate and expand where appropriate. Confirm estimate of sediment flow quantities from various sources. Collaborate with SCS to calibrate sediment models and confirm estimates of potential improvements from BMPs. (ongoing)

10.4 Work with other County departments to evaluate need and establishment of monitoring program for septic systems, wastewater collection and treatment systems, and storm drainage systems. (1995)

Action 11 Support a continued Research and Development Program on the lake:

Implementation:

11.1 Encourage academic and applied research, including pilot studies of iron geochemistry, phosphorous availability and recycling dynamics, and alum treatment. Continue to support university efforts by cost-sharing lab facilities and providing a research vessel. (ongoing)

11.2 Work with the Resource Conservation Districts and Soil Conservation Service (SCS) to update and detail the economic assessment provided in the May 1994 Economic Analysis prepared by SCS. (1995)

11.3 Encourage demonstration projects by private firms and/or other research facilities for weed harvesting and skimming technology. (ongoing)